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ORIGINAL CORRESPONDENCE.

Dr. Cornell's Letter.

For the Indiana Farmer and Gardener.

MOUNT JENNER, near Versailles, Ia., February 19, 1845.

Dear Sir:—The first and second Nos. of the Indiana Farmer and Gardener have come to hand, together with your invitation for me to become a contributor to its pages. It will afford me much pleasure to do so, whenever I think I can with profit to your readers. I am much gratified to see papers of this description multiplying so rapidly in the West. It argues well for the great interests, on the advancement of which our prosperity and happiness so much depends, individually, and as a people. These are interests in which we are all concerned, without reference to party, sect, or calling in life, and all should lend a helping hand toward their advancement.

A new era I confidently believe is opening up, and science is lending her aid at length to the cultivation of the soil. Chemistry, after a long and fruitless search for the philosopher's stone has given up the chase, not however without having learned wisdom by the way, and is now engaged in the analysis of the soil, and adapting it to the attainment of rich rewards to the cultivator who will profit by her lessons. Whilst the Professions of Divinity, Law and Medicine, have been thought to require suitable preparatory education to their successful practical utility and progressive improvement, strange is it, that the cultivation of the soil, requiring such accurate knowledge of constituent elements and the laws of vegetable life, should be thought by any portion of the community to require none. But it is to be hoped that this era is passing away. Indeed we know it is, and the time I trust is not far distant when professorships will be opened in our high schools, where agricultural chemistry, and vegetable anatomy and physiology will be taught to our farmers' sons, preparatory to their entrance on the practical duties of their vocation. Our own country is, of all others, perhaps, the best adapted to the attainment of the greatest perfection in agricultural science and its practical results. Our farmers are mostly the owners of the soil which they cultivate, and are not oppressed by the onerous tythe tax, and other exactions equally oppressive which belong to the old world. We only need an awakening, and how shall this be effected? The journals devoted exclusively to agriculture, cannot, unaided, effect this, because they cannot be made to reach the great mass of the people. Too many of them have a contempt for book farming, as they call it, and think the money thus appropriated a useless expenditure. The newspaper press, which in this country is all powerful for weal or for wo, must come to the work, and is coming with commendable zeal. There must be more than this: there must be organization. There must be societies, lectures, and exhibitions all over the land. We can, in times of political excitement, organize clubs in every township, with their committees of vigilance, &c. If

those who are seeking the offices of the country, with the newspaper press to aid them, can make this mighty moving of the waters, cannot the friends of agriculture, with the same press to aid them, by simultaneous and vigorous action, effect the organization required? Surely they can. Depend upon it, without organization no rapid advancement will be made. Artists in cities possess facilities for coming together, animating curiosity and profiting by contact, but our farmers are scattered over the country, and too often cultivating the prejudices as well as the soil inherited of their ancestors. These prejudices are hard to overcome, and nothing short of organization, contact and demonstration can effect it. The science of husbandry is intricate, and a certain proportion at least of those engaged in it should be educated preparatory to its successful developement. By getting up and sustaining the necessary excitement on the subject, this object will ultimately be effected. But I am extending these observations too far.

You propose to devote much attention to the orchard. This is as it should be. We need information on this subject. Three years since, I located on the farm on which I now reside, and my first object was to plant an orchard. When I came to enquire of my neighbors concerning the best varieties of fruits, I was much surprised at their barrenness of information on this subject. Most of their orchards are seedling, and many of those who have grafts have had them put in by itinerant grafters, haphazard, without any reference to their time of ripening. The time has been when there was some excuse for planting seedling orchards at the West, because grafted trees were not to be had; but that time has passed away. The industry and research of our nursery men have brought within our reach almost every thing which heart can wish. We can now make such a selection of trees, as will afford us good fruit the year round. Central Indiana is well supplied with nurseries, and we have them at various points on the Ohio river. A few days since, I visited the establishment of Mr. Ernst, at Spring Gardens, near Cincinnati, and was much delighted to see the great variety of trees congregated from almost every part of the civilized world by the enterprise of that gentleman, and which are destined to be disseminated and soon to yield their fruit in various sections of our country. Mr. Ernst seems to be all alive in the cause in which he has embarked, and unless I mistake him much, has enjoyment in the vocation based upon considerations other than mere pecuniary results. Such of our nurserymen as have not yet supplied themselves with such variety as is desirable would do well to give him a call instead of sending their orders East, as he has visited, more than once, the nurseries of the East, and taken much pains to procure the genuine articles advertised in his catalogue.

Permit me in conclusion to say, that I sincerely wish you success in the enterprise in which you have embarked, hoping that the Indiana Farmer and Gardener will meet with a circulation commensurate with its deserts, and will cheerfully lend my limited influence, to promote it.

Respectfully, &c.

W. T. S. CORNETT.

For the Indiana Farmer and Gardener.

Bees and Beehives--No. 1.

MR. EDITOR:—I am a great lover of honey, and very friendly to the makers of it; and, having taken considerable pains in observing their operations, and having tried to profit by the observations of others, I will offer a few practical remarks on the subject of raising them. Every man, and especially every farmer, who neglects to improve the advantage of the industry of bees loses by his neglect. The suggestions which I propose to make are principally the result of my own experience. Now is the time to prepare hives and have them in readiness. Hives should always be constructed with reference to the preservation of the bees and the convenience of removing the honey.

For the preservation of the bees the hives should be at least 1¼ inches thick. This preserves a more even temperature in the interior of the hive—the wood being a non-conductor of heat; the inside of a thick hive is cooler in summer and warmer in winter than of a thin one. They should be made *perfectly tight*, because if any cracks exist the bees will stop them, and the substance with which they do this is, of all others, the very element in which the bee-moth delights to deposit its eggs, and in which the young worms flourish best. For the same reason they should be made smooth inside.

Hives should always be so constructed as that the bottom forms an inclined plane of an angle of about fifteen degrees from a level. This enables the bees to remove worms which fall on the bottom. The bottom should be so attached to the hive as to admit of being conveniently closed at night and opened in the morning. On this, more than every thing else, depends the safety of the contents of the hive against the depredations of the worms. For this purpose, Mr. John M. Weeks' "Vermont hive" is the best of which I have any knowledge. I have used them

several years and have succeeded perfectly in guarding against the worms. But *be it remembered*, they must be *attended to:* shut a little after sunset and opened early in the morning. The reason for this is, the miller only operates in the night.

Another important item in making beehives is always to make them smaller at the bottom than at the top, to prevent the comb, when full, from falling in hot weather, which it often does when we depend only on the sticks.

The body of a beehive should never be larger than to contain a bushel, and the bees should be permitted to swarm at least once in every year; for in this way they prosper much better than when colonized in large apartments.

Attach boxes or drawers to the top of the hive for the convenience of removing honey. These can be removed without molesting the bees, and always furnished a pure article of honey, with its white comb, beautiful to the eye and delicious to the taste.—The practice of knocking off the top of a hive and taking out honey, at any and all times of the summer is very pernicious.—Brood comb is often removed, young bees destroyed, and sometimes the queen is lost, and then *all is gone*, and making the best of it, the bees get daubed with honey and more or less injured. The comb should never be disturbed after the first brood of eggs is deposited, which takes place soon after the bees commence working in the spring.

As soon as the bees commence labor in the spring, every hive, which is nearly full of comb, should be turned up and one half of the comb taken out, and the other half the next spring, and so continue. Then we have always old comb enough for brood-comb, and a good clean article for wax, and if a few worms have got in, we remove them. I have now a number of drawers full of fine last year's honey, and can always sell it at twelve and a half cents per pound when broken comb sells at from six to eight cents.

I give you these few facts now, to admonish you early, of the propriety, or rather, the necessity, of preparing your hives soon, and of taking out part of the comb this spring, and especially of making their hives, for a hive made in a hurry is a poor thing.

R.

To the Editor of the Indiana Farmer and Gardener.

SIR:—In your second number you tell us upon the authority of Mr. Sterling, of Kenmure, Scotland, that seedling potatoes were raised by Gerard, the English botanist, twenty years earlier than they were introduced into Ireland by Sir Walter Raleigh. Perhaps a litttle anecdote relative to the introduction of that valuable root into Ireland might not be unacceptable. I was not aware that Sir Walter introduced the potato into Ireland.

Sir Walter had a relation of the name Leigh, or Legh, who dwelt at Bank Hall, about four miles north of Liverpool, near the mouth of the Mersey. Many of the name, in all probability descendants of the family, still reside in and about Liverpool. This gentleman had obtained the potato from Sir Walter, and cultivated it with success. Albeit the soil in that neighborhood, being sandy, is finely adapted for the growth of potatoes. It is a red sand, and whether the oxyde of iron, which I suppose is the coloring material, has any influence on the potato or not I leave to others to determine; but the finest and earliest potatoes in England are produced in that vicinity. He sent seed to a friend of his in Ireland, with directions for planting it, and no more, except, it may be, some encomiums on the fruit to be produced. The Irishman planted it according to the directions given, and looked with impatient curiosity for his new vegetable. The potatoes grew. He tasted of the leaves. They were not palatable. He boiled them. They were no better. He waited for the fruit, tried the green apples—they were not good. He waited for them to ripen and tried them then, but with no better success. Chagrined and disappointed he ordered the plants to be dug up and thrown on the dunghill. Then he found the fruit, and was richly rewarded for all his anxiety and disappointment.

M. G.

Our correspondent (unknown to us, but from whom we should be pleased to hear frequently) will find in the first article of the *second* number of the Farmer and Gardener, a more detailed account of the introduction of the potato into Ireland.—*Ed. Ind. Farmer and Gardener.*

Strange if True.

We cut from the Baltimore Clipper the following *soi disant* fact, and only say, that, if true, it is an instance of sufficient precocity to satisfy the most greedy stock breeder.

"Mr. Edward Hartley, of Kent county, has informed the Kent News that he has a calf, of the age of one year, one month, and twenty-one days, which is the mother of a calf weighing 47¾ lbs.

Few men takes his advice, who talks a great deal.

Idleness is the mother of vice, the stepmother to all virtues.

Potato Crop.

The potato crop has never been as much attended to in this region as in New York, and New England. We believe, however, that its value is becoming apparent, and that potatoes will be produced to a much greater extent than hitherto. Reserving some remarks of our own to a future number, we insert the methods of cultivation, employed by eminent cultivators.

Spurrier's method of cultivation.—"Be careful," says he, "to procure some good sets; that is, to pick a quantity of the best kind of potatoes perfectly sound and of a tolerable large size; these are to be prepared for planting by cutting each root into two, three and more pieces, minding particularly that each piece be furnished with at least one or two eyes, which is sufficient. Being thus prepared, they are to be planted in rows not less than eighteen inches distance: if they are to be plowed between, they must not be less than three feet, and if four feet apart the more eligible."

"The best method I have found by experience is to make a trench either with the spade or plow, about five inches deep, and putting long dung or straw at the bottom, and laying the sets on it at their proper distances, which is from 9 to 12 inches apart, covering them with mould. They must be kept clean from weeds."

Mr. Knight's plan.—"He recommends the planting of whole potatoes, and those only which are of fine medium size—none to be of less weight than four ounces. The early sorts, and, indeed, all which seldom attain a greater height than two feet are to be planted about four or five inches apart in the rows, centre from centre, the crown ends upwards, the rows to be from 2 feet 6 inches to 3 feet asunder. The late potatoes, which produce a haulm above 3 feet in height, are to be planted 5 or 6 inches apart, centre from centre, in rows 4 or 5 feet asunder. The potatoes to point north and south and to be well manured."

Makenzie's plan.—"Work the ground until it is completely reduced and free from root weeds. Three plowings, with frequent harrowings and rollings are necessary in both cases, before the land is in a suitable condition. When this is accomplished form the drills; place the manure in the drills, plant above it, reverse the drills for covering it and the seed, then harrow the drills in length.

"It is not advantageous to cut the seed into small slips; for the strength of the stem at the outset depends in direct proportion to the vigor and power of the seed-plant. The seed plant, therefore, ought to be large, rarely smaller than the fourth part of the potato; and if the seed is of small size, one half of the potato may be profitably used. At all events, rather err in giving over large seed than in making it too small; because, by the first error, no great loss can ever be sustained; whereas, by the other, a feeble and late crop may be the consequence. When the seed is properly cut, it requires from 10 to 1200 weight of potatoes, from 12½ to 15 bushels, where the rows are at 27 inches distance; but this generally depends greatly upon the size of the potatoes used; if they are large a greater weight may be required; but the extra quantity will be abundantly repaid by the superiority of the crop, which large seed usually produces. Plant early in May."

Barnum's plan.—Plow deep and pulverize well by thoroughly harrowing; manure with compost, decomposed vegetables or barnyard manure; the latter preferable. When coarse or raw manure is used it must be spread and plowed in immediately. Stiff clay soil should always be plowed the fall previous. Lay your land in drills 27 inches apart, with a small plow, calculated for turning a deep narrow furrow running north and south; lay on the bottom of the drills 2 inches of well rotted barnyard manure, or its equivalent, then drop your potatoes, if of the common size, or what is more important, that they retain the usual quantity of eyes—if more they should be cut to prevent too many stalks shooting up together: put a single potato in the drills or trenches 10 inches apart, the first should remain uncovered until the second one is deposited, to place them diagonally in the drills, which will afford more space between the potatoes one way, than if laid at right angles in the rows. The covering may be performed with a hoe, first hauling in the furrow raised on each side the drill, then carefully take from the centre of the space the soil to finish the covering to the depth of 3½ or 4 inches; by taking the earth from the centre of the space on either side to the width of 3 inches, it will leave a drain of 6 inches in the centre of the space and a hill of 14 inches in width gently descending from the drill to the drain, the width and depth of the drill will be sufficient to protect the plant against any injurious effects of a scorching sun or drenching rain. The drains in the centre will at all times be found sufficient to pass off the surplus water.

"When the plant makes its appearance above the surface, the following mixture may be used: for each acre take 1 bushel of plaster and 2 bushels good ashes, and sow it broadcast as even as possible, a moist day

is preferable for this operation, for want of it a still evening will do.

"The operation of hilling should be performed *once* and *once only* during the season: if repeated after the potato is formed it will cause young shoots to spring up, which retards the growth of the potato and diminishes its size. If weeds spring up at any time they should be kept down by the hand or hoe, which can be done without disturbing the growth of the stalk.

"My manner of *hoeing* or *hilling* is not to haul in the earth from the space between the hills or rows, but to bring on fresh earth sufficient to raise the hill around the plant 1½ or 2 inches; in a wet season the lesser quantity will be sufficient, in a dry one the larger will not be found too much. The substance for this purpose may consist of the scrapings of ditches or filthy streets, the earth from a barnyard that requires levelling: where convenient it may be taken from swamps, marshes, the beds and banks of rivers or small sluggish streams at low water. If planted on a clay soil, fresh loam taken at any depth from the surface even if it partakes largely of fine sand will be found an excellent top-dressing. If planted on a loamy soil, the earth taken from clay pits, clay or slaty soil will answer a valuable purpose: in fact there are but few farms in the country but what may be furnished with some suitable substance for top-dressing if sought for. The hoeing and hilling may be performed with facility by the aid of a horse and cart, the horse travelling in the centre of a space between the drills, the cart-wheels occupying the two adjoining ones, thereby avoiding any disturbance or injury to the growing plants."

Mr. Barnum's method attracted great attention at the East, from the fact that he actually raised from 1000 to 1500 bushels of potatoes to the acre! When this was first published it was received with great incredulity; calls were made for the method of cultivation, which drew forth an elaborate article from Mr. B. of which the above is but a morsel. It afterwards was stated, and the most authentic and unquestionable evidence adduced in proof, that Mr. Barnum, raised, upon experiment, *at the rate* of more than 3000 bushels to the acre. Now although the labor and the great amount of seed required would prevent the cultivation of many acres of land thus—yet it is worth a trial in a small way; and if one acre can be made to produce 1000 bushels, it will be as much as is usually dug from *five* acres; and it is questionable whether the labor and seed for five acres are not more than that required by Mr. B's method for one.

Ed. Ind. Farmer & Gardener.

Mr. A. Robinson's plan.—He says:—"If I plant low ground I plow my ground in beds in a different direction for the water to drain off, then harrow lengthwise of the furrows and small lands; having a number of them, side and side, I take a light sharp horse-harrow, and harrow crosswise of the beds, which pulverizes the ground and fits it well for planting, leaving a small space between the rows, which answers for two purposes, one for a guide for the rows for dropping: this is done by dropping in the middle of the tracks of the harrow, which is easily and correctly performed, by any small boy. It also serves completely to fill up all cracks or holes, the seed lying fair and easy. I then drop my manure directly over the seed potatoes, and when covered up, the seed is safe from inundation, by being some inches above the surrounding surface: the seed lies warm under this manure, the rains drain into the middle furrows; I plant 3 feet distance; it takes the most of the surface that is pulverized to cover the potatoes, and by the time they are twice well hoed, my hills are as I want them to be. They naturally rise high above the surface in the form of a sugar loaf: this hill is to turn off heavy rains, and it naturally keeps the potatoes from being too moist, and they are often injured thereby. I have found that 3 feet each way is the most proper distance to insure a good crop; I plant three common sized potatoes in the hill; it is no use to cut them: if cut small the vines come up small and weak, grow fast and fall down."

The following method we take from an able writer in the Louisville Journal, signing himself *Grazier*:

The ground selected for potatoes should be dry, where no surface water will rest. It should be rich; if not naturally so, it must be made so by a sufficient quantity of good manure. It should be plowed twice, and at least twelve inches deep. After the first plowing it should be harrowed and cross harrowed; and, after the second ploughing, harrowed again, and if not very friable and free from clods it should then be rolled. The mould cannot be too fine, as on the depth of the ploughing, and fineness of the earth, depend the *retention of that moisture* so indispensable to the health and maturing of all bulbous roots in particular. The ground thus prepared, should then be opened off in *drills*, three feet from the centre of one to the centre of the other, and, if practicable,

running north and south. When opened, if manure is to be applied, it must then be hauled in carts; the horse going down between the drills, the bed of the cart will cover two drills, where the manure can be pulled out at intervals, in quantity sufficient, not only for the two drills described, but for one on each side in addition; all of which one hand, following with a fork, can easily distribute and spread in the four drills.

This done the ground is ready for the seed. I shall first describe the whole of the cultivation and harvesting necessary, and then speak of the seed and its preparation separately. The seed should be dropped in the manure, twelve inches apart, and as quickly as a drill is planted, the plough should follow and cover it in. The *double mould-board* plow, which is the proper implement for the business, will cover two drills by going once up and once down the field; if the single mould-board plow is used, it will of course cover but one drill by the same operation. When your ground is thus gone over, your land will all be in high drills, and can rest so for about one week, when you must take a two horse harrow, and harrow your drills *across*, leaving your field as level as before your drills were opened. There is no danger, as some would suppose, of disturbing your seed. In a few days, when you can see your plants distinctly above ground, from one end of your drills to the other, you must take your one-horse plow, and go up and down each drill, running the *land side* of your plow as close to the plant on each side as you safely can, throwing the earth *away* from it, which operation will leave your field in raised drills between your plants. In a few days after this you take your *double mould-board* plow, and go down the centre of the blank drills, covering all your plants nearly out of sight, observing as you go along that the weight of earth is thrown *against* and not *on*, the plants. Then, in some days after, when your plants are well over the top of your drills, take your scuffle, an implement not unlike your cultivator in this country, and for which the cultivator can be substituted, and go over your whole field between the drills, giving the earth a good stirring, and not be afraid of encroaching a little at each side on the drill. At this stage, a boy should follow the scuffle, and pull up any weeds that appear on the top or sides of the drills. In a few days after this, when your plants are strong and well up, you go down the centre between the drills, with your *double mould-board* plow, the wings well apart, and throw the earth well up to the plants. This must sometimes finish the cultivation, if the vines have spread and are closed too much, but *generally* the vines will allow it, and the crop be much benefitted by one more scuffling; but this time take *particular care not to disturb the drill at the bottom*, as the bulbs are now forming and spreading; then gently run your *double mould-board plow* through the whole field again, *narrowing the wings of it*, which will have the effect of adding the earth, and compressing it to the *bottom* of the drill, where the bulbs are forming, rather than throwing it up to the stalk at top, where there is sufficient already. This finishes the cultivation.

To prepare the seed you must select well shaped, even potatoes, not too small, nor too large. Cut them, leaving one good eye at least to every set; prepare them from two to three weeks, *at least*, before you plant; and each day as you cut roll your sets in pulverized lime, and spread them on the barn floor to dry: when dry, heap them in a corner till taken out to plant. If this plan is pursued, and the ground selected and prepared as directed you may rest satisfied that so sure as the laws of nature are invariable, and that like effects follow like causes, as sure will a *good* and *sound* crop of potatoes be produced in this climate with no variation in the result, except what may be occasioned by the vicissitudes of the season.

Ten tons of potatoes, two thousand two hundred and forty pounds to the ton, is considered a *fair* crop in Ireland. Twelve tons an *extra* one—equal to three hundred and seventy bushels the first, and four hundred and forty-four bushels the second, allowing sixty pounds to the bushel, which I have found to be about the average weight of a bushel here. I have grown four crops of potatoes in this country, in two different situations and latitudes (six acres the smallest quantity cultivated any season.) Each crop was treated in every particular as here described, and in three instances out of the four, I got a little over four hundred measured bushels to the acre. The fourth crop was only about three hundred and fifty bushels to the acre, caused by the peculiarity of the season, which produced an almost entire failure with my neighbors, under their management.

It is a saying of Lavater, that he who assumes important airs, exhibits his credentials of ignorance.

St. Augustine says that pride is the first thing that overcomes a man, and the last thing that he overcomes.

There are a great many asses without long ears.

Praise doth a wise man good, but a fool harm.

Peach Trees.

In our third number, p. 38, we expressed opinions at variance with the usual custom of forcing the growth of fruit trees. We had an eye especially upon the injurious effect of such practice upon the pear tree. Since then we have received the New England Farmer containing an article from J. C. D. of N. Jersey, originally inserted in the Albany Cultivator, and without, at present, expressing any opinion upon the propriety of so much pruning as is therein advised, we cordially believe in the views upon forcing the growth of fruit trees. We commend it to the special attention of cultivators of fruit.

Ed. Ia. Farmer and Gardener.

In late visits to several of the nurseries of peach trees, both in Delaware and New Jersey, I have observed with wonder and astonishment, the gigantic size to which the trees are forced by every means of human ingenuity, many acquiring the height of 8 feet and three inches in circumference, from the bud of last autumn. And if to this be added the first year's shoot from the seed--say 6 feet, which is amputated in the spring, we have the enormous growth of 14 feet from the seed, in a year and a half! Now I would ask, does not this extravagant drainage from the root, or whence soever it may be supposed to proceed, produce a laxity, and a disorganization of the sap-vessels, sufficient to engender disease in the plant, which might then be compared to an overgrown youth? If so, putricity must follow, and then blight, in the shape of *life*--the worm; and the yellows, of necessity and according to the law of nature. And is it not a fact, that the trees now raised by our nurserymen, are twice as large in their growth as formerly; and do not these men pride themselves in the art of producing them of enormous size, purchasers also, generally preferring those that are so? I lately saw trees from the nursery of a person at Moorestown, N. J., measuring more than eight feet in height, an inch and a half in diameter, with roots sufficient in growth for trees of ten years old, one year only from the bud! Now, of what advantage is all this? None whatever, but a decided injury; productive, it is believed, of the very evil so much complained of. I know that some persons do not covet these large trees, preferring those of a smaller size; but if these are taken from the same nursery, they are, then, those that have sprung from small & weak seed, or have been overgrown by larger plants, and are to be rejected, for the same reason that small apples from among those of larger growth on the same tree are always inferior, being generally diseased or immature; so the evil is by no means avoided, or rather it is augmented.

At Manyunk, on the Schuylkill, I saw, sometime since, a small nursery of peach trees, situated on an eminence; the soil thin, and resting on a bed of disintegrated rock, but dry and healthy. Here I found the trees about four feet in height from the bud, close and vigorous in their form, with no rampant leader; the wood, hard, well ripened, and of a deep red color. The owner observed, "his trees were sought after at double price, for besides being of the best sorts and true to their kind, they were sure to grow, when transplanted; their roots being small and compactly formed around the body of the tree; besides this, they are free from disease, and would remain so," pointing to the well ripened wood, and the compact growth of the tree as indicative of health and vigor of constitution. The following course of treatment is, therefore, with much confidence, recommended for adoption.

First, raise the trees on a healthy and elevated spot, without the aid of manure or extra culture with the view of forcing their growth; shortening all large and vigorous shoots that may be thrown out, even during their first and second season. The operation of budding is too well understood, to require either note or comment. At the time of planting out, let the branches, leaders as well as side shoots, be headed down to within three inches of the body of the tree, removing the tap root, and others of overgrown size; taking care that the southerly aspect, which it bore in the nursery, is given to it in its new location. And from this period, let a right system of pruning be adopted, without fear of evil consequences. No tree bears the knife so well as the peach; and to its regular and systematic use, is a cure of its diseases to be looked for. Let, therefore, every overgrowing branch be shortened, keeping the head of the tree of regular dimensions. It is seldom, indeed, that we see a peach tree that is not top-heavy; yet the order of pruning must be the reverse of that practiced on the apple tree, where it is customary to thin out the middle branches, for in the peach, the bearing wood should be there retained, as also on the sides of the larger branches; by these means, much breakage would be prevented, and thousands of the finest trees be saved from distruction —it is the healthiest trees which fall, crushed by the weight of fruit hanging at the ends of long branches; not those affected by the yellows.

The perpetual cultivation of the peach

orchard was resorted to for the purpose of preventing the evils complained of; but would those who have practiced it the most vigorously say that in any instance it has been found effectual? To those who still advocate such a course as necessary to the well-being of the trees, the production of fine fruit, the eradication of the weeds, the destruction of the worm, and the prevention of the yellows, the following facts, fully to be relied upon, speak volumes.

Major Reybold, of Delaware, has an old peach orchard of about three acres, that has not been cultivated for five or six years, having been used as a hospital for sick sheep; yet from thence, for several years past, the finest fruit sent to market has been picked.

* * * * * *

If at any time, it be advisable to refresh the trees, this can be done by top-dressing far more beneficially than by the plow, the use of which, in the estimation of those who adopt it, "gives fresh vigor to the growth of the tree"—the very thing to be deprecated. The peach orchard then, will become a sheep walk or a hog-pasture, affording a profit instead of a loss, in seasons when fruit fails: the sheep performing the labor of pruning the lower branches of the trees, on which the fruit is always inferior, and keeping down the weeds far more effectually than can be done by the plow; while the hogs will do all the *cultivation* that is necessary, and clear away the diseased and fallen fruit; all stock being removed before the time of ripening. I lately observed on the farm of Mr. Bryan Jackson, of Newcastle county, Delaware, that a portion of the peach orchard had been thrown into the hog-pasture; here the trees were most vigorous; and under each, the tramping of the hogs had done, in the way of cultivation, as much as was deemed necessary. The trees are four or five years old; and I was glad to find that the intelligent owner intends at once to lay down the whole orchard to permanent pasture, for the purpose of grazing sheep and swine.

J. C. D.

He is unhappy who wishes to die; but more so he who fears it.

Vice is set off with the shadow or resemblance of virtue.

It is not difficult to *earn*, but to *save*. No man grows rich whose money walks through him.

Once in every ten years, every man needs his neighbor.

I heard one say so, is half a lie.

One lie draws ten more after it.

INDIANA FARMER & GARDENER.

Indianapolis, Saturday, March 8, 1845.

Competition.

A competition, exceedingly agreeable to us, is going on between Terre Haute and Ft. Wayne, which shall send the most subscribers to the Indiana Farmer & Gardener. Terre Haute first came in with *twenty* subscribers; after resting a day or two she sent up *ten* more, making thirty. At this point Fort Wayne broke in, led on by friend Hubbel, with a band of *thirty-one*. Terre Haute, looking enviously at that extra *one*, thereupon sends up *ten* more. Fort Wayne, determined to hold her own, immediately sent in *fifteen* more, besides some from the country. We are waiting to see if Terre Haute will bear *that*. To our minds it is very provoking conduct on the part of Fort Wayne, and not to be endured, although we must, in fairness to Terre Haute, say, that we are afraid there will be no apology or recanting on the part of these men of Allen Co. Although both parties have made us their *confidant*, our situation is not very awkward after all.

Spring Work on the Farm.

We are standing upon the edge of spring, and before another Farmer and Gardener greets you, you will, doubtless, be all a-sweat in the fields.

Thoroughly overhaul your tools; let plows be sharpened; repair their stocks if any where *started*, or weakened; look after the chains; the swingletrees; the yokes for your oxen, or the harness for your horses. Don't have any straps to replace, or harness to tie up with tow strings after you get into the fields, and when time is precious. NOW IS THE TIME TO SAVE TIME, BY GETTING READY. Old rusty buckles will give way the moment the plow strikes a root; stiches which have been longing for some time to fall out and part, will be likely to do it when you have the least time to mend them.—Then we shall hear talk; you'll be cursing the old horse or the old ricketty harness, and declaring that your "luck is always on the wrong side;" and you may depend upon it, that it always will be, so long as you are not more *careful*. Good luck is a wary old fish

which nibbles at every body's hook; but the shrewd and skillful angler only catches it.

The opening of spring is usually debilitating both to man and beast. Your horses cannot stand hard usage at once; some of them will need physic—all of them should be put to work carefully; increase their task gradually; *favor* them; and you will get abundantly paid for it before their summer's work is done.

A good farmer may be known by the way he *manages* his spring work. Consider how much there is of it. Cows are calving; mares, foaling; young heifers for the first time to be broken to milking; all the tools to be got ready; the ground to be broken up and seeded; the orchards to be set; or old ones to be attended to; a garden to be made: and a hundred other things to do. Now here is a chance for good management, and a yet better chance for *bad* management. There is as much skill in "laying out" a season's work for the farmer, as there is in "laying out" a frame for a house or barn.

Bethink you of all the *mistakes* you made last season; if you made any good hits, improve upon them this year. Every farmer should resolve to do *all things* as well as he did the last year, and *some* things a great deal better.

While every thing is merry, birds singing, bees at work, cattle frisky, and the whole animated world is joyous, do but search and see if, among all beasts, birds, or bugs, you can find one that needs whiskey to do its spring or summer work on!

Look again; seeds are sprouting; trees budding; flowers peeping out from warm nooks. Every thing grows in spring-time. Youth is spring-time, habits are sprouting, dispositions are putting out their leaves, opinions are forming, prejudices are getting root. Now take at least as good care of your children as you do of your farm. If you don't want to use the land you let it alone, and *weeds* grow: but when you wish to *improve* a piece, you turn the natural weeds under, and sow the right seed, and tend the crop. I have heard good kind of folks object to much "*bringing up*" of their boys. They guessed the lads would come out about right. You break a colt, and break a steer, and break a heifer, and break a soil, and if you wont break your children, they will be very likely to break you,—heart and pocket.

Fermenting manures should not be hauled or spread until you are ready to plow them under. [If you spread manure on meadows it should be fine, and well rotted, and let ashes be liberally mixed with it.] If you let manure lie a week or ten days exposed in the fields to the air, it will waste one half of "its sweetness on the desert air." Let the plow follow the cart as fast as possible, and the gases generated by your manure will, then, be taken up by the soil, and held in store for your grain.

Deep plowing.—There may be some rare cases where, for special reasons, shallow plowing is advisable. But the standing rule upon the farm should be *deep plowing*. A good farmer remarked the other day to us, "One of my neighbors who is always talking of *deep plowing* was at it last summer, and I followed in the furrow, and his depth did not average more than four inches; he did not measure on the *land side* but on the mould-board side." The reasons are very strong for deep plowing.

(1.) When crop after crop is taken off the first four or five inches of top earth, it tends speedily to rob it of all materials required by grass or grain. Every blade taken from the soil, takes off some portion of that soil with it.

(2.) Deep plowing brings up from beneath a greater amount of earth, which, when subjected to the frosts, the atmosphere, and the action of the plow, becomes fit for vegetation.

(3.) Summer droughts seldom injure deeply plowed soils; certainly not to that degree that they do shallow soils. The roots penetrate the mellow mould to a greater depth, and draw thence moisture when the top is as dry as ashes. Will not some one who is curious in such matters try two acres side by side plowed shallow and deep, respectively, and give us the history of their crop?

Quantity of seed.—It has been often said that American husbandry was unfavorably peculiar in stinginess of seed-sowing. It is certain that very much greater quantities are employed in Great Britain and on the

continent than with us, and that much greater crops are obtained per acre. In part the crop is owing to a superior cultivation; but those who have carefully studied the subject affirm, that in part, it is attributable to the use of much greater quantities of seed. We give a table shewing the average quantity of seed per acre for different grains, in England, Germany, and the United States. The table was formed in that manufactory of so many valuable articles, the Albany Cultivator. It must be remembered that the average crop is not the average of the best farming States, but of the whole United States.

	GERMANY. Seed per acre—Product.		ENGLAND Seed per acre—Product.		UNITED STATES. Seed per acre—Product.	
Wheat,	2¼ bushels.	25 bushels.	2⅛ to 3¼ bu.	28 bushels.	1 to 1½ bush.	18 bushels.
Rye,	2 do.	25 do.	2 to 2⅛ do.	25 do.	1 to 1½ do.	15 do.
Barley,	2¼ do.	35 do.	2⅛ to 4 do.	36 do.	1½ to 2 do.	25 do.
Oats,	2 to 4 do.	40 do.	4 to 7 do.	32 do.	2 to 3 do.	35 do.
Millet,	7 quarts.	35 bushels.				
Peas,	2¼ bushels.	26 do.	3 to 3¼ do.	30 to 40 do.	2 to 2½ do.	25 do.
Corn,	20 quarts.	36 do.			20 to 30 qts.	30 do.
Turneps,		30 to 35 tons	1 to 2 pints.	30 to 35 tons.	1 to 2 lbs.	20 tons.
Buckwheat,	1 bushel.	27 bushels.	1 to 1½ bush.	26 bushels.	16 to 20 qts.	15 to 30 bu.
Clover,	14 pounds.		14 to 18 lbs.		5 to 10 lbs.	
Flax,	2 to 3 bush.	10 bu. seed.	2 to 3 bush.	10 bu. seed.	1 to 1½ bush.	8 to 12 bush.
Hemp,	2½ to 3 do.	650 pounds.	3 do.	550 pounds.	1½ to 2½ do.	500 pounds.
Potatoes,	5 do.	300 bushels.	8 to 12 do.	250 bushels.	8 to 20 do.	175 bush.

A bad agreement is better than a good law-suit.

Spring Work in the Orchard.

1. There is a great deal more pruning done than is needful or healthful. Our hot summers and strong growth of wood, make every leaf on the tree precious. Dead limbs should be taken out. Where the tree is really *tangled* with wood, thin out. Where branches are rubbing across each other *severely*, take off one of them. Grub up *every* water sprout from the roots. If you can avoid it do not use them for trees, for the tree thus obtained will inherit the same propensity of sending up water shoots.—Sometimes, in scarcity of stock, they are used rather than to have none; but it is then only a lesser of two evils.

2. *Time of pruning.* There is a bad practice abroad of pruning before the leaves are out. English books direct to prune in February; and we suspect that the custom sprang up at the east from the old country example. It is not safe for us to follow the *specific* processes of Great Britain or the Continent. OUR OWN *well settled experience is to be our rule of practice.*

There is no better month in the year to prune, *than that month in which the tree is making the most wood.* It is plain that the sooner a wound heals, the better; and equally plain, that a tree which is *growing* will heal a wound quicker than an inactive tree. All the matter which goes to form wood, or to form the granulations by which a cut heals, comes from the *downward* current of sap, or sap which has been elaborated in the leaf. Of course, when the tree has the most leaves, and the leaves are preparing the greatest quantity of *proper juice* or elaborated sap, that is the time for pruning, because the time for healing. In this climate we have preferred the last of May for spring pruning, and the last of August for summer pruning—the exact week varying as the season is forward or backward.

3. *Instead of pruning at this early period, let trees be thoroughly scraped and scoured.* A three sided scraper, such as butchers use to clean their blocks with, or any convenient implement, may be applied to the trunk and large branches with force sufficient to take off the *dry, dead* bark. Only this is to be

removed. Take soft soap and reduce it by *urine* to the consistence of paint. With a stiff shoe brush, rub the whole trunk and the limbs as far up as is practicable. The bark will grow smooth and glossy; insect eggs will be entirely destroyed; all moss and fungus vegetation removed, and the bark stimulated and made healthier. THIS IS BETTER THAN ANY WHITE-WASH, and just as convenient.

4. Lime is better used as follows: Remove the earth from the trunk, and put about half a peck to each tree. Every spring spread and dig in the old lime, and put new in its place. Unleached ashes are good to be dug in around a tree. If your soil is calcarious—full of lime—these applications are not needful. Thoroughly rotted manure, or, better yet, black vegetable mould may be dug in liberally, and will supply the soil with nutriment, and the roots will find their way in it with great facility.

5. When a tree is manured, remember that the *ends* only of the roots take up nourishment—and that the ends of the roots are not found close by the *trunk*. We often see heaps of manure piled about the *trunk*, and the ends of the roots are three yards or more distant from it. You might as well put your fodder down at your cattle's hind legs, and wonder that they did not get fat on it. Treat your trees as you do your stock; put their food where their mouths are. YOUNG ORCHARDS are better without stimulating manure. Let the soil be mellowed, and then give the trees their own time, and if they do not bear quite as soon, they will live longer and be less subject to disease.

Garden Work.

Spring has come. Every body is beginning to think of the garden. A little of the experience of one who has learned some by making many mistakes will do you no harm.

Too much work laid out.—When the winter lets us out, and we are exhilarated with fresh air, singing birds, bland weather, and newly springing vegetation, our ambition is apt to lay out *too much work*. *We* began with an *acre*, in garden; we could not afford to hire help except for a few days; and we were ambitious to do things as they ought to be done. By reference to a Garden Journal, (every man should keep one) we find that we planted in 1840, *sixteen* kinds of peas; *seventeen* kinds of beans; *seven* kinds of corn; *six* kinds of squash; *eight* kinds of cabbage; *seven* kinds of lettuce; *eight* sorts of cucumber, and *seven* of turneps—*seventy-six varieties of only eight vegetables!* Besides, we had fruit trees to transplant in spring—flowers to nurture, and all the etceteras of a large garden. Although we worked faithfully, early and late, through the whole season, the weeds beat us fairly; and every day or two some lazy loon, who had not turned two spades full of earth during the season, would lounge along and look over, and seeing the condition of things, would very quietly say: "Why, I heard so much about your garden—whew! what regiments of weeds you keep—I say neighbor, do you boil that *pusley* for greens?" It nettled us, and we sweat at the hoe and spade all the harder, but in vain; for we *had* laid out more than *could* be well done. No body asked how much we *had* done—they looked only at what we had *not* done. To be sure so many sorts were planted only to test their qualities—but the laying out of so large a work in spring is not wise. *A HALF well done is better than a* WHOLE *half done.* Remember there is a *July* as well as an April; —and *lay* out in April as you can *hold* out in July and August. We have profited by our own mistakes and have no objections that others should do it.

Asparagus. The beds should be attended to; remove all weeds and old stalks; give a liberal quantity of salt to the bed—if you have old brine, or can get fish brine at the stores, that is better than dry salt. Asparagus is a *marine* plant, growing upon sandy beaches along the sea coast, and is therefore benefitted by salt, to which, in its *habitat* it was accustomed. Put about three or four inches of old, thoroughly rotted manure upon the bed; fork it in gently, so as not to wound the crowns of the plant. Directions for forming beds belong to a later period in the season.

Onions.—It is time that these were sown or set.

If you prefer seed, sow, across beds four

feet wide, in drills eight inches apart—young gardeners are apt to begrudge *room*—give it freely to every thing, and it will repay you;—when they come up, thin out to one for every inch; as you wish young and tender onions for your table, draw these, leaving, at least, one every five inches in the row. If your soil is deep and very rich, onions can be grown in one season from the seed as well as from the set—we try it almost every year and *never fail*, although told a hundred times: 'You could do that in the old States, but it won't do out here.' It had to do, and did do, and always will do, where there is no lazy men about; but nothing ever does well in a slack and lazy man's garden; plants have an inveterate prejudice against such, and wont grow; but he is a darling favorite among weeds.

The white or silver skin, and the yellow Portugal have been favorite kinds with us to raise from seed. They are tender, mild flavored, but do not keep as well as the *Red. Strong onions always keep better than mild ones.*

If you prefer top-onion sets, or sets of any other kind, plant them out at the same distances, viz: eight inches between the row and five or six between the sets. Inexperienced gardeners are afraid that *little* sets no bigger than a pea—will not do well. It is a mistake—they will make large onions—put them *all* in, if they are sound. Plant the sets so that the top shall just appear above the surface.

If you plant out old onions for *seed*, let them be at least a foot apart and stake them when they begin to blossom. If you plant the *top-onion* for sets you need not stake them, for they cannot shed out their seed if they fall over. It is not generally known that the same onions may be kept for seed for many years. Mr. Vanhouten informs me that he uses the old roots from year to year without any deterioration in the product.

Transplanting.—All fruit trees, most kinds of shade trees, shrubs, *hardy* roses, honeysuckles, pinks, lilacs, peonies, &c. may be raised, divided, and transplanted now unless your soil is *very wet*. All *hardy* plants may be safely transplanted just as soon as the ground is dry enough to crumble freely—and not till then. In planting out shrubs, remember that they will *grow;* if you put them near together for the sake of present effect, in a year or two they will be crowded. We set at ample distances and fill up the spaces with lilies, peonies, phlox, gladiolus, and herbaceous plants which are easily removed.

Manure.—Corn and potatoes will bear green and unfermented manure. But all ordinary garden vegatables require *thoroughly* rotted manure. If the soil is sandy, leached ashes may be applied with great profit at the rate of 70 or 80 bushels the acre. The soil is made more retentive of moisture, and valuable ingredients are secured to it. Salt may be used with great advantage on all garden soils, but especially upon light and sandy ones. Thus treated, soils will resist summer droughts and be moist when otherwise they would suffer. Salt has also a good effect in destroying vermin, and it adds very valuable chemical ingredients to the soil. Soapsuds should be carefully saved and poured about currants, gooseberries and fruit trees. Charcoal, pulverized, is excellent, as it absorbs ammonia from the atmosphere, or from any body containing it, and yields it to the plants. Let a barrel be set near the house filled with powdered charcoal. Empty into it all the *chamber-lie.* The ammonia will be taken up by the charcoal, and the barrel will be without any offensive smell. But as soon as the charcoal is saturated, it will begin to give out the peculiar odor of urine. Let the charcoal then be mixed with about five times its bulk of fresh earth and well worked together, and it will afford a very powerful manure for vegetables and flowers. In Europe where manure is precious, it is estimated that the excrementitious matter, slops, suds, scraps &c. of a family, will supply one acre, for each member, with manure* There are few families whose offal would not afford abundant material for enriching the garden, and with substances peculiarly fitted for flowers, fruits, and esculent roots.

Peach pits.—Those who providently saved

* See note, p. 98, Colman's Tour, 2d part, where is given an estimate by a distinguished agricultural chemist, Mr. Haywood.

peach pits last fall and laid them in heaps, should now crack them and sow the meat. They will be found already in a growing state. The ground having been deeply spaded, let them be laid in rows and covered *very thinly*. Those who have no pits to plant may find many sprouting under old trees which bore freely last season, unless the hogs have been there before them, in which case they will have all been regularly cracked and planted.

Shade Trees.

We believe that no man ever walked under the magnificent elms upon the Boston Common, or beneath the Lindens in Philadelphia, or through Elm street in New Haven Ct., without conviction of the beauty and utility of shade trees. Trees not only are objects of beauty—the architecture of nature—but they promote both health and comfort. Our ardent summers, from June to October, make open, unshaded streets, almost impassable, and reflect heat upon our dwellings from the side walks and beaten road.

In the West, the growth of trees is so rapid, and the supply from our own forests so abundant and convenient, that every village and city, and every well conducted farm should be lined with shade trees. We will offer a few suggestions upon the kinds to be selected and the manner of setting.

The Locust. (*Robinia Pseudacacia.*) This tree is very popular, and is almost the only one, at the West, set for shade trees. It has a beautiful form, grows very rapidly, bears a profusion of beautiful and very fragrant blossoms, (pendulous racemes of pea shaped flowers;) its foliage is singularly pleasing—the young leaves being of a light pea green, and growing darker with age, so that, in the same tree, three or four distinct shades of green may be seen;—it grows freely in all soils, and is not infested by any worms;—its timber is almost as durable as cedar, and, in the West, is not subject to the attacks of the *borer*, as it is in the East.

On the other hand, the tree becomes unsymmetrical with age, it is brittle, breaking easily at slight wounds, even when they have healed over. It is not a long-lived tree, and requires careful protection from cattle.

We would advise a more sparing use of it. Let *every other* tree be a Locust, and the alternate, maple, or elm, oak, tulip, &c. By this method the Locust will afford immediate shade, and, when they become unsightly, the intervening trees will have grown to a goodly size. The Locust should be transplanted just as the buds are ready to burst; they should be protected by frames as soon as set. Good cases may be made, at a trifling expense, by taking strips of inch and a half stuff, three inches wide, and nine or ten feet long, sharpen the lower end, and drive it into the ground four or five inches, and in a box formed about the tree; let cross pieces be nailed at the top. Be careful that the tree does not *rub* upon the case; although the wound will heal over, yet, in the first high wind, it will be apt to break off at that point. This tree is rather peculiar in that respect.

The Locust was introduced to Europe by a Frenchman named Robin. From him the Genus (*Robinia*) took its name. There are but four species belonging to it, and they are all indigenous to N. America, viz:

Robinia Pseudacacia, (common Locust.) *R. Viscosa*, confined to the South-western parts of the Alleghany mountains—bearing *rose* colored blossoms and being even more ornamental than the former; it is equally hardy, and if it could be introduced among us would form a valuable addition. Locusts no where appear to a better advantage than when planted in clumps of six or eight on a lawn; and if the *R. Pseudacacia* and *R. Viscosa* were contiguous, blending the pure white and the rose colored blossoms, the world might be challenged for a finer effect.

The *R. hispida* (*rose-acacia* of our gardens) is a highly ornamental shrub; its branches are, like the moss rose, covered with minute spines which give it a fine appearance. A fourth species is said to exist in the basin of Red River. The favorable opinion here expressed of the Locust will remove any impression of prejudice when we say, that *they are altogether too much cultivated*. Our forests are full of magnificent shade trees whose claims can never, all things considered, be equalled by the Locust.

Elm, (*Ulmus Americana*) commonly called White elm. Of the four species of elms

indigenous to the United States, but two are particularly worth notice, the White elm, and Slippery elm (*U. pulva.*) But the former of these is so incomparably the superior, that it should be selected wherever it can be had. It attains a height of one hundred feet; is very longlived; grows more and more beautiful with age; its long branches droop over, forming graceful pendulous extremities, and no one who has seen the Boston Mall, or the N. Haven elms, or those scattered along the villages of Connecticut will think that Michaux exaggerated in pronouncing this tree to be *the most magnificent vegetable production of the Temperate Zone.* It is unquestionably the monarch among shade trees—as superior to the oak for avenues and streets, as the oak is to it for parks and forests. The great main street of every village should be lined with White Elms set at distances of 50 feet, and Locusts between to supply an immediate shade, and to be removed so soon as the slower-growing Elm has spread enough to dispense with them.

THE MAPLE.—The following varieties are in our forests, and are beautiful shade trees for the borders of farms, door-yards, public squares, avenues, streets, &c. The SUGAR MAPLE (*Acer saccharinum,*) WHITE MAPLE (*A. eriocarpum,*) RED MAPLE (*A. rubrum.*) This last variety shews beautiful red flowers before its leaves put out in spring, and, like the sugar maple, brilliant scarlet leaves in autumn. The Maple is a beautiful tree, of fine form, the leaves of the different varieties are variously shaped, and all beautiful; it is free from disease, and noxious insects.

Besides these, the Ash, Oak, Tulip, Beech and Walnuts are all worthy of being transferred to our streets. Shade trees for door-yards and public squares and pleasure grounds require a separate notice, as in some material respects they should be differently treated.

We warmly recommend, in lining streets, that each alternate tree, only, be Locust.

It is better for *effect* that each street, or at least continuous portions of each, have *one kind* of forest tree, so that an avenue of similar trees be formed. In planting grounds, it is well to group trees of different kinds; but in streets, an avenue should be of Elms, or of Oaks, or of Sycamores, or of Maples, and not of all of them mingled together.

A Plea for Health and Horticulture.

Every one knows to what an extent women are afflicted with nervous disorders, *neuralgic* affections, as they are more softly termed. Is it equally well known that, formerly, when women partook, from childhood, of out-of-door labors, were confined less to heated rooms and exciting studies, they had, comparatively, few disorders of this nature. With the progress of society *fevers* increase first, because luxurious eating vitiates the blood; *dispepsia* follows next, because the stomach instead of being a laboratory is turned into a mere ware-house, into which everything is packed, from the foundation to the roof, by gustatory *stevedores.* Last of all come *neuralgic* complaints, springing from the muscular enfeeblement and the nervous excitability of the system.

Late hours at night, and later morning hours, early application to books, a steady training for *accomplishments*, viz: embroidery, lace-work, painting rice paper, casting wax flowers so ingeniously that no mortal can tell what is meant—lilies looking like huge goblets, dahlias resembling a battered cabbage—these, together with practicings on the piano—or, if something extra is meant, a little tum, tum, tuming, on the harp and a little ting-tong on the guitar,—reading "Ladies' books," crying over novels, writing in albums, and original correspondence with my ever-adored Matilda Euphrosyne, are the materials, too often, of a fashionable education. While all this refinement is being put on, girls are taught, from eight years old, that the chief end of women is to get a beau, and convert him into a husband. Therefore every action must be *on purpose*, must have a discreet object in view. Girls must not walk fast, that is not lady-like;—nor run, that would be shockingly vulgar; nor scamper over fields, merry and free as the bees or the birds, laughing till the cheeks are rosy, and romping till the blood marches merrily in every vein; for, says prudent mama, "my

dear do you think Mr. Lack-a-daisy would marry a girl whom he saw acting so unfashionably?" Thus, in every part of education, those things are pursued whose tendency is to excite the brain and nervous system, and, for the most part, those things are not "*refined*," which would develope the muscular system, give a natural fullness to the form, and health and vigor to every organ of it.

The evil does not end upon the victim of fashionable education. Her feebleness, and morbid tastes, and preternatural excitability are transmitted to her children, and to their children. If it were not for the rural habits and health of the vast proportion of our population, trained to hearty labor on the soil, the degeneracy of the race in cities would soon make civilization a curse to the health of mankind.

Now we have not one word to say against "accomplishments" when they are *real*, and are not purchased at the expense of a girl's constitution. She may dance like Miriam, paint like Raphael, make wax fruit till the birds come and peck at the cunning imitation; she may play like Orpheus harping after Eurydice (or what will be more to the purpose, like a Eurydice after an Orpheus,) she may sing, and write poetry to the moon, and to every star in the heavens, and every flower on earth, to Zephyrs, to memory, to friendship, and to whatever is imaginable in the spheres, or on the world,—if she will, in the midst of these ineffable things, remember the most important facts, that *health* is a blessing; that God made health to depend upon exercise, and temperate living in all respects; and that the great objects of our existence, in respect to ourselves, is a virtuous and pious character, and in respect to others, the raising and training of a family after such a sort that neither we, nor men, nor God, shall be ashamed of them.

Now we are not quite so enthusiastic as to suppose that horticulture has in it a balm for all these mentioned ills. We are very moderate in our expectations, believing, only, that it may become a very important auxiliary in maintaining health of body, and purity of mind.

When once a mind has been touched with zeal in floriculture it seldom forgets its love. If our children were early made little enthusiasts for the garden, when they were old they would not depart from it. A woman's perception of the beauty of form, of colors, of arrangement, is naturally quicker and truer than man's. Why should they admire these only in painting, in dress, and in furniture? Can human art equal what God has made, in variety, hue, grace, symmetry, order, and delicacy? A beautiful engraving is often admired by those who never look at a natural landscape; ladies become connoiseurs of "artificials," who live in proximity to real flowers without a spark of enthusiasm for them. We are persuaded that, if parents, instead of regarding a disposition to train flowers as a useless trouble, a waste of time, a pernicious romancing, would inspire the love of it, nurture and direct it, it would save their daughters from *false taste*, and all love of meretricious ornament. The most enthusiastic lovers of nature catch something of the simplicity and truthfulness of nature.

Now a constant temptation to female vanity—(if it may be supposed for the sake of argument, to exist) is a display of person, of dress, of equipage. In olden times, without entirely hating their beauty, our mothers used to be proud of their spinning, their weaving, their curiously wrought apparel for bed and board. A pride in what we have *done* is not, if in due measure, wrong or unwise; and we really think that rivalry among the young in rearing the choicest plants, the most resplendent flowers, would be altogether a wise exchange for a rivalry of lace and ribbons and silks. And, even if poor human nature must be forced to allow the privilege of criticising each other something severely, it would be much more amiable to pull roses to pieces, than to pull caps;—all the shafts which are now cast at the luckless beauty, might more harmlessly be cast upon the glowing shield of her dahlias or upon the cup of her tulips.

A love of flowers would beget early rising, industry, habits of close observation, and of reading. It would incline the mind to notice natural phenomena, and to reason upon them. It would occupy the mind with

pure thoughts, and inspire a sweet and gentle enthusiasm; maintain simplicity of taste; and, in connection with personal instruction, unfold in the heart an enlarged, unstraitened, ardent piety.

Raspberries, Strawberries, and Gooseberries.

Currants, Gooseberries, Raspberries, Strawberries, &c., are termed "Small Fruit." We will give some directions for the spring work which these require.

Raspberries. The sorts usually found in our gardens are rejected from all good collections as worthless. The Antwerp, red and white, have, until lately, been regarded as the best. They can be obtained at this place and in Cincinnati. Two new kinds are very highly thought of at the east, the *Franconia* and the *Fastolf*. This last is an English variety; was found growing on a gentleman's ground among some lime and brick rubbish — evidently a seedling—and removed to his garden. It was a number of years before it attracted attention; but, lately, it has been much in demand and bids fair to claim a rank among the first, if it is not *the* first. It can only be had, we believe, at the east. It will probably be for sale here by another year.

A deep, rich, loamy soil which is moist, proves best for this fruit. It prefers a half shady position.

When first planted out put them four feet apart in the row, and the rows three feet from each other.

In old beds cut out the *last year's bearing wood*, now worthless, and also all the new shoots but four or five to a root; grub up all that have come up between the rows. Cut those which are reserved for bearing to about five feet in length, and tie them gently to a stake. Thus treated from year to year, and well manured, raspberries will return a rich reward.

Strawberries. The number of kinds is immense.—Knight, late president of the London Horticult. Society, had *four hundred* kinds in his garden, and most of them seedlings of his own raising. The early *Virginia* is regarded as the best early kind. Hovey's, Warren's and Keen's Seedlings are admirable sorts. Wiley's and Motter's seedlings originated in Cincinnati and are esteemed. There are many other fine sorts which an amateur cultivator would wish, not necessary to common gardens, where two or three choice sorts will suffice.

Almost ever cultivator has a way of his own in raising Strawberries

In private gardens, in a soil well enriched and deeply spaded, let beds be formed about four feet wide; upon these set three rows of hills and the plants about fifteen inches apart in the row. *Pinch off all runners through the season*, unless they are wanted for new plants.

Old beds, grown over and matted, had better be destroyed; but if, for any reason, it is desirable to save them, mark out lines every eighteen inches and dig alleys through the bed, by turning the plants under. In this way the patch will be thrown into beds of eighteen inches width. Before this is done take an iron toothed rake and rake the bed severely. Do not be afraid of tearing the plants; go over the whole bed thoroughly.—It will seem as if scarcely a dozen plants were left, but in a few weeks your bed will be entirely covered with a strong growth.

Gooseberries. This fruit is very much neglected because its merits are only little known. There are two sorts found in our gardens, the common gooseberry and *English*, by which name is meant a large, coarse, thick skinned green variety. It is not generally known that there are any other cultivated sorts; and as these are inferior they are little cared for. The Lancashire (England) Nurserymen publish 300 varieties! The select list of Mr. Thompson of the London Horticultural Society's garden comprises *fifty six* varieties; the still more condensed select list of *Robert Manning* (Mass.) includes *twenty eight* sorts. Some of these bear fruit as large as a medium sized plum. There are four colors, red, yellow, green and white; to each color are two sizes, large and small fruits. Those who have not seen and tasted the Scotch and Lancashire varieties of the gooseberry do not know what the fruit is. In sending for them, select a *trustworthy* nurseryman, and request him to send, of each color, such kinds as have proved, with him, the best; and in such numbers as you may wish. The gooseberry delights in three things, a very rich soil, a shady position, and a free circulation of air. If accommodated in these respects, it will be free from mildew and give a sure and ample crop of delicious fruit.

Hill tops are the best sites. In gardens the open and airy parts should be selected; in low and confined situations they mildew. Hog manure is esteemed the best for this fruit. When the fruit begins to set, if threatened with blight, take a moderately strong lime. water (sulpher added will be all the better) or, if lime is not convenient, lye from wood ashes, and drench the bushes freely with it. A large watering pot should be employed. Gooseberries may be increased from cuttings like the currant, and with the same ease.

Gooseberries, Raspberries, Strawberries and Currants ought to be found in every farmer's garden. The trouble of cultivation is slight and the return of wholesome fruit very great. One woman can, for the most part, bestow all the attention which they need.

Currants. There are very few varieties of this fruit. Our common red and white, if well cultivated, are very good. The Large Dutch Red, and White, are much larger varieties and generally preferred in the best Eastern gardens Every farmer, if he has nothing else, has a long row of currant bushes, and gets, usually, five times as many currants as he can consume. Very few fruits have so few diseases incident to them as the currant. It is not infested with worms, its fruit is subject to no blight, it bears every year, is rarely affected either by severe winters or late frosts, and we do not remember a season in our lives when there was not, at least, a partial currant crop.

We advise those who are careful in such matters to train their currants to a *tree form*; let a cutting be set, rub out all the buds but two or three at the top; at about twelve or fifteen inches from the earth let the branches put out, and never permit suckers to grow, or branches to stand lower than this. The difficulty which some have found in tree currants, that they are top heavy and require staking to prevent their being bent by winds and their own weight, arises from having the stem too long We have seen two feet and even more allowed. If twelve or fifteen inches be allowed, the stem, in a few years, will become strong enough to withstand winds and sustain its own top. Thus formed they are beautiful to the eye, convenient for borders, allow a free circulation of air under and through them, are easy to work in spring or fall manuring, and easy to prune, when, as should be done every year, you take out the old wood.

Gooseberries will do better to be trained in this way, than in the bush form. The top once formed there is no difficulty in keeping it so. If you are faithful to grub up every sucker for one season you will have few to plague you after that.